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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,808	12/03/2001	William J. McFarland	25053.00700	6909

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EXAMINER	
HE, AMY	

ART UNIT	PAPER NUMBER
2858	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/007,808	MCFARLAND ET AL.	
	Examiner	Art Unit	
	Amy He	2858	MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-64* is/are pending in the application.

4a) Of the above claim(s) *19-42 and 60-64* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 43-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4,6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. Claims 44-60 have been renumbered as 43-59 to be in consecutive order in accordance to 37 CFR 1.126. Accordingly, the dependencies of claims 44-60 have been renumbered.

Election/Restrictions

2. Applicant's election without traverse of the invention disclosed in claims 1-18 and 43-59 (Group I) in Paper No. 5 is acknowledged. Claims 19-42 and 60-64 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention (Group II).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5-12, 17-18, 43, 47-52 and 55-56 rejected under 35 U.S.C. 102(b) as being anticipated by Hardman (U. S. Patent No. 6, 122, 490).

Referring to claim 1, Hardman discloses an antenna integrity check device (100 in Figure 1; column 3, lines 26-44), comprising:

a measurement device (the interrogation device, column 3, line 39) configured to determine at least one value of an antenna (103);

at least one electronic device (transceiver 101 or controller 120) connectable to the antenna; and

a controller (110 or 120) configured to prevent operation of the electronic device based on the determined antenna value.

Referring to claim 5, Hardman discloses a resonant frequency detector (the interrogation device, column 3, line 39) as the measurement device to determine a resonant frequency of the antenna.

Referring to claim 6, Hardman discloses a challenge mechanism (the interrogation signal, column 3, line 34) configured to send a challenge to the antenna, and a response mechanism (response signal, column 3, line 36) configured to receive and decode the response received from the antenna.

Referring to claim 7, Hardman discloses said challenge mechanism is an information request (requesting the antenna characteristic), and the response is the determined antenna value (the determined antenna characteristic).

Referring to claim 8, Hardman discloses that said challenge mechanism is further configured to send an encrypted key (encrypted code, column 7, lines 5-10) to the antenna; and said response mechanism is further configured to decode the response based on the key.

Referring to claim 9, Hardman discloses that the controller (controller 120 in Figure 3) indexes a lookup table (stored in ROM 310) of antenna properties with the determined antenna value.

Referring to claim 10, Hardman discloses the antenna integrity device wherein said controller adjusts a power output (step 510 in Figure 5) of a transmitter attached to the antenna based on the determined antenna value.

Referring to claim 11, Hardman discloses wherein the antenna is connected to said at least one electronic device and said measurement device via the same physical connectors (113 or 102 in Figure 1).

Referring to claim 12, Hardman discloses wherein the same physical connectors(113 or 102 in Figure 1) transmit each of RF signals, information signaling and DC power.

Referring to claim 17, Hardman discloses that the antenna integrity check device further comprising a programmable memory device (110 or 120 in Figures 2-3) connected to said controller and configured to store programs and data related to testing integrity of the antenna and other functions

Referring to claim 18, Hardman discloses that the antenna integrity check device further comprising:

a communications port (102 or 113 in Figure 1) coupled to said controller;

wherein said controller is configured to download programs (the interrogation signal or response signal) from said communications port and store the downloaded programs and data in said programmable memory device.

Referring to claims 43, 47-52 and 55-56 are the method claims corresponding to the apparatus claims 1 and 5-9. They are rejected for the same reasons as stated above for the rejection of the apparatus claims.

4. Claims 1, 3-4, 13-15, 43-46 and 53-54and are rejected under 35 U.S.C. 102(b) as being anticipated by Gomez et al. (U. S. Patent No. 5, 134, 418).

Referring to claim 1, Gomez discloses an antenna integrity check device (in Figure 2), comprising:

a measurement device (238, 216) configured to determine at least one value of an antenna (202);

at least one electronic device (transceiver 212) connectable to the antenna; and

a controller (230) configured to prevent operation of the electronic device based on the determined antenna value.

Referring to claims 3-4, Gomez discloses that the measurement device comprises a voltage/current source connected to the antenna, and a current/voltage measurement device connected with the voltage/current source and the antenna (column 5-column 6).

Referring to claim 13, Gomez discloses that the antenna (202) is connected to said at least one electronic device (212) via a single pin (conductor within wrist strap 204, column 3, lines 29-30) connection and ground; and

the DC current source is also connected to the antenna via the single pin connection and ground, such that said connection carries both RF signals single pin from the at least one electronic device to the antenna and DC current from the measurement device to the antenna (see Figure 3).

Referring to claim 14, Gomez discloses that said measurement device is configured to read (using RAM 218 in Figure 2) the antenna value from a set of pins connected to the antenna.

Referring to claim 15, Gomez discloses that the pins (conductor of the wristband, column 5, lines 47-57) are shorted or open at the antenna, wherein the antenna value comprising binary pattern based on a pin being open or shorted.

Referring to claims 43-46 and 53-54, they are method claims corresponding to the rejected apparatus claims 1, 3-4 and 13-15. They are rejected for the same reasons as stated above in the rejected apparatus claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gomez et al. (U. S. Patent No. 5, 134, 418), in view of Yamashita (U. S Patent No. 5, 268, 765).

Referring to claim 2, Gomez discloses an antenna integrity check device as claimed in claim 1, wherein the controller is a microcomputer. Gomez does not disclose a logic gate as the controller. Yamashita discloses a logic gate serving as a controller (column 6, line 51). A person or ordinary skill in the art would find it obvious to modify Gomez to disclose the use of a logic gate for turning off the electronic device, in order to

simplify the design of the antenna integrity check device, and also since it has been held to be within the general skill of a worker in the art to select a known tool (logic gate) for a known purpose (controlling) on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin,* 227 F.2d 197, 125 USPQ 416 (CCPA).

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gomez et al. (U. S. Patent No. 5, 134, 418).

Referring to claim 16, Gomez discloses a display device connected to the controller for indicating the operational status of the electronic device attached to the antenna. Gomez does not specifically disclose that the display is a status light. A person of ordinary skill in the art would find it obvious to modify Gomez to use a status light, instead, for indicating the operational status of the electronic device, since Gomez suggests that other methods of providing a sensible indication could be used as well. and that it has been held to be within the general skill of a worker in the art to select a known tool for a known purpose on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin,* 227 F.2d 197, 125 USPQ 416 (CCPA).

7. Claims 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardman (U. S. Patent No. 6, 122, 490).

Referring to claims 57-58, Hardman discloses a method of checking integrity of an antenna. Harman does not disclose a compiled computer instructions stored on a computer readable media to automatically perform the steps of the method. A person of ordinary skill in the art would find it obvious at the time of the invention to modify

Hardman to write the method steps into computer instruction, since it has been held to be within the general skill of a worker in the art to select a known tool for a known purpose on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin,* 227 F.2d 197, 125 USPQ 416 (CCPA).

Referring to claim 59, Hardman discloses an antenna. Hardman does not specifically disclose a dual element planar antenna. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Harman to connect a dual element planar antenna, or any other types of antenna to the feed-line (113 in Figure 1), for checking the integrity of different types of antenna, since it has been held to be within the general skill of a worker in the art to select a known tool (dual element planar antenna) for a known purpose on the basis of its suitability for the intended use as a matter of obvious design choice *In re Leshin,* 227 F.2d 197, 125 USPQ 416 (CCPA).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy He whose telephone number is (703) 305-3360. The examiner can normally be reached on 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on 703-308-0750. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.

AH
October 29, 2003

N. Le
Supervisory Patent Examiner
Technology Center 2800